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for 10 minutes and deposited on denatured (70% formamide, 2X SSC at 70°C for 2 minutes) chicken or turkey metaphases, mounted, sealed with rubber cement and incubated in a humidified chamber at 37°C for 18 to 20 hours. The slides were washed in 50% formamide/2X SSC at 42°C for 15 minutes and O.1X SSC at 60°C for 15 minutes. Blocking was done using 2% blocking reagent (Boehringer Mannheim) and the signals were detected using avidin-FITC (5 μg/ml, Vector labs) in 1% blocking solution. Slides were washed in 4X SSC/0.1% TWEEN-20 (polyoxyethylene sorbitan monolaureate) for 15 minutes at 42°C, stained for 10 minutes in propidium iodide (400 ng/ml in 2X SSC) and rinsed for 5 minutes in 2X SSC/0.01% TWEEN-20. Slides were mounted in p-phenylenediamine-11 (PPD-11) antifade and observed under a Zeiss Axioskop fluorescent microscope. --

Please amend the captioned paragraph beginning on line 13 of page 10 as follows:

# -- <u>SEQUENCE 1</u> (43.Seq)

1 gateaettte eetaatatte ttgtgtttet tgtttgttga eetgtaatge

51 agttctgagt tttggaaagg aactaattaa gaccagagga gagataattt

101 tettttatea aaaaacaaac aaacaaacaa aaaaacgaat tettaceact

151 ttacaaaaat tttccatttt gaaggccagt acagccatag cattcatcta

201 ctttttgctt tggat (SEQ ID NO: 1) --

Please amend the captioned paragraph beginning on line 1 of page 11 as follows:

## -- **SEQUENCE 2** (71.Seq)

- 1 gatcaggtgg cetgtagtag acaacaacaa caatggggtg ceetttgttg
- 51 cettagtete taactegeae ceacacaca ttteaagttg ettgtggeea
- 101 ttetteaggg acagttette acaatetatt cettteetga tgtagaagge

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151 gteaceteet ecceteetge etegtttgte eettetaaac tgeaggtatt

201 agtattgata getaaggtea agteatggga accateteae eaggttteag

251 tgttggcaac tatgttatgc tttcttagga gcatggtggt tccaactctt

301 ccctgcttat ttcccaagct gtgtgtgatg gtaggatagc attcaagtgg

351 gaggageeta teggettttt ggaggtaete etaaateeet gatatteeee

401 tgattecegt acttetteet tgecaaggge eegecaatge atagtteaat

451 ttctcatgca gacgctaagg aaaggtggac cc (SEQ ID NO: 2) --

Please amend the captioned paragraph beginning on line 12 of page 11 as follows:

## -- <u>SEQUENCE 3</u> (80.Seq)

1 gatcgtatgt attttttac ataggataga aaatggccaa taggaaataa

51 gacagtacag ctactaagaa agaaacacaa ttacacacac acacacaca

101 acacacaca acacatttga aaaacgcgct gcacagcagt gtgggtattt

151 tttcacaaga gagacacact ctacagtaca cagccagctc tactttgtcg

201 cacagtetea gtgtgtgttt gecaacagga egeggtteae agggagatat

251 tgtcctcttg tgtgtgtgga gacacagaga cagag (SEQ ID NO: 3) --

Please amend the captioned paragraph beginning on line 1 of page 12 as follows:

#### -- <u>SEQUENCE 4</u> (81.Seq)

1 gateceetgg aggaagggea atggeaacce acteeagtat tettgeetga

51 agaataccat ggtcagtttt gcctcctggg ctatagtcca tggggttgca

101 aagagteagg catgactgag egactetete tetetetete tetetetete

151 acacacaca acacacaca acacacggeg tetetetete tetetataca

201 tataggetgt gtgteteget atteteaeat gagggaaaet eatatetage

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- 251 acgtggcaca aatattgttt gtggctctca caaaagacat gtgggcgcac
- 301 aaaggteece eeeeggtgga tacanegeet tggttttta taacecaage
- 351 ctgtg (SEQ ID NO: 4) --

Please amend the captioned paragraph beginning on line 10 of page 12 as follows:

## -- <u>SEQUENCE 5</u> (131.Seq)

- 1 gatcacatat gtaaactagg gaattgcata ataagattaa atgtaggtgt
- 51 agaacgtggc atgaaggaag gtagaattag gtggtaccta tetettetga
- 101 aacaaactga gaatcetact accaatcaac atattetaca taccacacac
- 151 acattttttc tcgagtaaaa tataaactaa tgagaaactt ccctag (SEQ ID NO: 5) --

Please amend the captioned paragraph beginning on line 15 of page 12 as follows:

## -- <u>SEQUENCE 6</u> (147.Seq)

- 1 gateceaage aacacatagn cagacaatea cacacacaca cacacacaca
- 51 cacacacaca cacacacaca cacatectet ecceacaata cateeegaga
- 101 ggggggagag acactetete teceteteta taggggagae eeggagaget
- 151 ggctctgttg tctctctaca ccggacatac agtggagcac atctcacact
- 201 tgtgtctttg tctctctaca ccggacatac agtggagcac atctcacact
- 251 tgtgtctcta tctctccctg tccctgttga tccatctct ttcacacatc
- 301 tetecagate ttagegetag agteteetgt ettetetetg egeaatttgt
- 351 gtgatagaga cacctgatat gttgtgtggg ggagacatct gtgtgtctct
- 401 gtgtcatccc agaggatttt tctctcccac acttagaggc cttctcaaga
- 451 gatgggaggt tttaatgggg tgtg (SEQ ID NO: 6) --

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Please amend the captioned paragraph beginning on line 6 of page 13 as follows:

## -- <u>SEQUENCE 7</u> (166.Seq)

- 1 gatcattett etgttteeca ttetaatggg aatteteeae acacacaca
- 51 acacacaca acacacacat ettetteece ttacatggaa aaaaateete
- 101 cacacccetg gacactgatt actetecete tteecagaga gagate (SEQ ID NO: 7) --

Please amend the captioned paragraph beginning on line 10 of page 13 as follows:

### -- <u>SEQUENCE 8</u> (196.Seq)

- 1 gateceetag agaagggaat ggetaeteac teeagtatte ttgeetggag
- 51 aatteegtgg teagaggage etggaagget ataateeata gagtegeaag
- 101 agteagacag gaetgagtga etaacacaca catgeacaca cacacacaca
- 151 cacacacaca cttgctctag ggagaggcat agagatgtaa tctctcctaa
- 201 aatggggtg gcgatggccc ctgcggccaa gtaatcgcca cacatgcgta
- 251 tteeeettaa gattgggtta ggeeteeett atgaggagag accagggaga
- 301 gaatgggete tetetetete teaeteecea aeegagtaag tggtaaaaaa
- 351 ggttttcctg gattacaatt ttggtgttac agaattggaa aaaaatattt
- 401 ttggggctcc ccctcagtt ta (SEQ ID NO: 8) --

Please amend the captioned paragraph beginning on line 1 of page 14 as follows:

#### -- **SEQUENCE 9 (199.Seq)**

- 1 ctagcaaaaa caccccaca agttatgaaa acaacggctt aatatagtaa
- 51 tgtgtgtgtg tgttgtgtgt tgttgcacac cacagttttc tctgatactc
- 101 aaacetetet etttetetae aggggeeece cataacacag eggetgagat
- 151 gtgtgacggg aaggcgtggc cttttacaca tttgtggtat ggtctgccaa



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- 201 ggcccctat tgcccccac aactacggag atacactagg ggcgacccgc
- 251 aggcgcgcga cccccaggtg gggccccgag (SEQ ID NO: 9) --

Please amend the captioned paragraph beginning on line 8 of page 14 as follows:

## -- **SEQUENCE 10** (204.Seq)

- 1 ctttaggagg ttetetegag taagettttt ggatteett ggtteecaag
- 51 catcacatgg tacaggcagt cacacacaca cacatacaca cacacacaca
- 101 cacacacaca cactectete eccacaatae atacegagag gggggagaga
- 151 cactetetet ecetetetat agggggagee ecacagaget ggetetgttg
- 201 tetetecea eeggacatae agtggageae ateteaeaet tetgteteta
- 251 tetetecetg eccetgtgae atceatetet etteacaeaa teteaceeag
- 301 gatettageg etagagaeee eetgteette tteteetggg gaaatttttt
- 351 gtggataaga gacacccgat atattggtgt gggggagaac atcttgtgag
- 401 gtctctgttg tgccatccca acaggaattt ttatctcccc cacaattaga
- 451 ggcccctcct caagagtgtg tgagggtt (SEQ ID NO: 10) --

Please amend the captioned paragraph beginning on line 1 of page 15 as follows

#### **SEQUENCE 11** (235.Seq)

- 1 gatcacagat gtatgtattt ttttacatag gatagaaaat ggacaatagg
- 51 aaataagaca gtacagctac taagaaagaa cccacattta cacacacaca
- 101 cacacacaca cacacacaca agtgtttaat ccgctgcaca gcattgtgga
- 151 catttttaca caagagagac acactctaca gtttgcgccc agctctag (SEQ ID NO: 11) --

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Please amend the captioned paragraph beginning on line 6 of page 15 as follows:

## -- <u>SEQUENCE 12</u> (249.Seq)

- 1 gatcattett etgttteeea ttetaatgga atteteeaea cacacaca
- 51 cacacacaca cacacactet tettteteet gacatggaaa aateteecee
- 101 acacceggg acactgattt etetecetet ecceaacact gtgagcaaga
- 151 ggagtttatt ttgtgtgtgt cactcttcca gggagagaga gatc (SEQ ID NO: 12) --

Please amend the captioned paragraph beginning on line 11 of page 15 as follows:

### -- <u>SEQUENCE 13</u> (258.Seq)

- 1 ctaggcatcg gttgggaggt ggtgagtaat tacttgtctg acattagtcc
- 51 tgtaacattg ggtgtgtgt tgtgtgtgtg tgtgtattcc ccttgggaat
- 101 tggttttctc aaccacaagt tettettttt tttttttete eeeeetttte
- 151 ttctgaaaat aagtacttgg ggggtttccg cccccccgg taaataaaat (SEQ ID NO: 13) --

Please amend the captioned paragraph beginning on line 16 of page 15 as follows:

## -- <u>SEQUENCE 14</u> (290.Seq)

- 1 ctagtggete ceaageaaca catageeaga caacacacac acacacacac
- 51 acacacaca acacacaca acacacacte etetececae aatacateee
- 101 gagaggggg agagacactc tetetecete tetatagegg gagececaea
- 151 gagetggete tgetgtetet etaeaeegga eataeagtgg ageaeatete
- 201 acattegtgt etetatetet eeetgeeeet ggtgacatae atetetette
- 251 acacatetea ecaggtetga gegetagagt etcetgtett etetetgege
- 301 aatatttgtg atagagacat ctgatatatt gtgtgtggga gacatcttgt
- 351 gagtetetgt gtgeatecea gaggattttt ateteeceae aetag (SEQ ID NO: 14) --



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Please amend the captioned paragraph beginning on line 6 of page 16 as follows:

## -- <u>SEQUENCE 15</u> (309.Seq)

- 1 gatccatgaa aactttccga gttgtattgt ctaggtgaaa acacacacaa
- 51 acacacaca acacacaca acacaacagg gagatgagtc ttgcaagaga
- 101 ataggggaga gttatgtcac caagtctggt gaggtatata gcgtataggg
- 151 agccaacatg teagacatet gatgtgetaa gattaacatt ttattttatt
- 201 taatgtgtga gateteatat ageggetett ettatatatg aegtetegea
- 251 atgtctcttt atgtgtgtta ttctctgagc ccctgggaga tatctgtcat
- 301 cagagagaag agacatacac atacaggggt tatatatttt eteeetgtgt
- 351 gtggagatgg agggtatttt ggacaagctc aacactcatt ggctcccaga
- 401 gagagaaaag gagcaactgt tgcacccggg gctctgtagc tgggatc (SEQ ID NO: 15) --

Please amend the captioned paragraph beginning on line 15 of page 16 as follows:

#### -- **SEQUENCE 16 (341.Seq)**

- 1 caattgggta catctacctg gtaccccacc cgggtggaaa atcgcatggg
- 51 cccgcggcgg ttctaggaag tactctcgag aagcttttgg gttctttggg
- 101 teccaageag cacatggaca ggeaateaca cacacacaca cacacacaca
- 151 cacacacaca cacacacaca cteeteteee cacaatacat eeegagaggg
- 201 gggagagtca ctctctctcc ctctctatag ggggcgcccc taagagctgg
- 251 ctctgttgtc tatctacacc gcacatacaa tggagcacaa ctcacactag (SEQ ID NO: 16) --

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Please amend the captioned paragraph beginning on line 2 of page 17 as follows:

## -- <u>SEQUENCE 17</u> (398.Seq)

- 1 gatcaaagca tggaggtcat gccaggcact gaacaaaatg gtagagagtg
- 51 attetatgae tgaetaagae eteatgeaae aacaagtgaa gagteacaae
- 101 tgcaaacaga agtacaactt agcaaatcct attttcagga aacactaaac
- 151 cgtaatactt gcacgatttt ttctttaata cagtaataat tcttttagaa
- 201 tttggatata tcttttaaga tacatatttg tctaaatacc aaggcaggat
- 251 atgagcataa aatagctaag gttagctatg gtgttatatt taagaagacc
- 301 acagagcaat aggagcatac ttttcttggg gtagaagggg cccttaaagg
- 351 teacetag (SEQ ID NO: 17) --

Please amend the captioned paragraph beginning on line 11 of page 17 as follows:

# -- <u>SEQUENCE 18</u> (420.Seq)

- 1 ctagecacat cetataacte caetecacet ttaateetga tttetgtgte
- 51 tettetetaa eetetatgge etttetetaa agtteeceaa tateaacaat
- 101 cettttecce actgggacet ceagtttatt gattetacea tgteactate
- 151 catggtcaac cacttgtggt attataggat gtcgcgtgtg tgtgtgtgtg
- 201 tgtgtgcatg tgtgtgtgt tgggtgtcag agagttccaa tctgggggac
- 251 ctatggtttg taaacaacag gtctcttgcc aaggaagat (SEQ ID NO: 18) --

Please amend the captioned paragraph beginning on line 18 of page 17 as follows:

## -- <u>SEQUENCE 19</u> (435.Seq)

- 1 ctagegeteg tgeecetgea gttegaeaet eagtggetee teeaeaeaea
- 51 cacacacaca cacatcaata tatatataga tagatagata gatagaggag

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